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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER	
CARLSON, JEFFREY D	

ART UNIT	PAPER NUMBER
3622	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/978,144	ROSENBERG ET AL.	
	Examiner	Art Unit	
	Jeffrey D. Carlson	3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,7,8,11-15,17-23,31,38-41,49-56,59-63 and 66-83* is/are pending in the application.

4a) Of the above claim(s) *40,41,53 and 54* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,7,8,11-15,17-23,31,38,39,49-52,55,56,59-63 and 66-83* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/15/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the paper(s) filed 10/15/2008.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 50 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 50, it is unclear how this further limits the computer program product of claim 49. Claim 49 sets forth a medium with instructions. Claim 50 states that this medium is "within" a video replay system but does not appear to further limit the features (i.e. the programming) of 49. If applicant intends the programming to also be capable of performing video replay functionality, then that should be specified in claim 50. Otherwise, claim 50 could merely describe *placement* of 49's programmed medium within a case of a video replay system; this location/placement does not further limit the medium or its programming.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-3, 5, 7, 8, 11-15, 17-23, 38, 49-51, 55, 56, 59-63, 66-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering (US20020083439) in view of Merriman et al (US5948061).

Regarding claims 1-3, 8, 38, 49-51, 78, 79, Eldering teaches personal video recorders (PVRs) that include local hard drive storage for received ads [0013, 0014]. The local device includes an ad processing unit which determines the ad queue/order and inserts the ads into available ad opportunities (avails) upon request for an ad [0015, 0046]. More importantly, the ad processing unit also re-orders the ad queue upon certain parameters such as a channel change (i.e. a context change) by the viewer [0016]. This enables the newly re-ordered queue to best target the viewer [0018]. The channel change can be taken to represent a global context parameter. The ad queue/order is taken to be a “data structure”. In order to accomplish this targeting, Eldering receives not only advertising content from a server, but also each advertisement’s targeting metadata [¶ 0074]. Both the ad content and the ad metadata

is then stored locally so that the real-time ad queue re-ordering can be accomplished by the client programmed with such a capability [¶ 0015]. Eldering provides metadata associated with each stored advertisement so that ads appropriate to the current context (viewer, channel, program type, time, etc) can be put towards the top of the queue [¶ 0032, 0034, 0051, 0053, 0054, 0063, 0065-0067]. In particular however to the "checking to determine if the updated parameter is a trigger parameter", Eldering teaches that certain parameter changes may in some cases not represent trigger parameters – changing from "60 minutes" to "Dateline" may in some cases not trigger re-ordering of the ad queue since the programs are both of the same program type, "news shows" [¶ 0060]. This exemplifies the concept that the ad metadata can specify show types and that detected changes in shows within the same show type are not (in this example) trigger parameters. Of course, depending on the advertiser-specified metadata, other parameter changes are indeed trigger parameters. This collection of targeting metadata for each ad are taken to represent the claimed "ad control files" whereby each targeting parameter of Eldering relates to the claimed trigger parameters. It would have been obvious to one of ordinary skill at the time of the invention to have received and stored newly released batches of advertising content and corresponding metadata and to have added them to the pre-existing collection so that new advertising for newly released products can be launched alongside ongoing ad campaigns; this obvious accumulation of targeting parameters is synonymous with a trigger table as claimed. Eldering does not appear to teach a weighted placement value for ads derived by a product of a re-determined placement value and the ads weight value. Merriman

et al also teaches methods for selecting suitable ads targeted to a viewing user's profile. Among the subset of targeted ads suitable for each user, Merriman et al then uses a satisfaction index for the ads of advertising campaigns that acts as weighted placement value [col 6 lines 27-59]. The index (weighted placement value) is derived for each ad using a product of ratios representing the (continually re-determined) percentage of desired ad quantity impressions and the percentage of elapsed campaign duration. Doing so enables Merriman et al to not only choose user-targeted advertising, but a subset of user-matched advertising is automatically inspected if such ads are "running ahead (or behind) of schedule", so as to influence selection from among the targeted subset, more accurately accomplishing the advertiser's campaign goals (number of impressions) over time. Any of the 4 specified values (or certain combinations of them) of Merriman et al can be taken to represent the claimed "weight value" and "re-determined placement value". It would have been obvious to one of ordinary skill at the time of the invention to have provided such a feature with the continually re-ordered advertising queue of Eldering's PVR's ad processing unit, so that ad campaigns can be better managed with respect to impression rate/goals.

Regarding claims 5, 11, 13, 15, 62, 63, 66, 67, Eldering teaches that the ad queue is a stacked list of ARLs (ad resource locators) that point to the stored locations for each ad in the queue. The next ad to be played is placed on the top of the heap/stack. [fig 3, fig 6, 0032, 0049].

Regarding claim 7, the automated re-ordering of the ads triggered by a channel change is taken to represent interpreted rules that are programmed in to the ad selection software.

Regarding claim 14, Eldering teaches that each ad can include various targeting parameters such as time of day, program being watched, identified viewer, etc [fig 5, fig 6, 0081]. The re-ordering of the ad queue according to matched parameters is taken to represent re-ordering a placement value according to a weight value for the ads and their parameters. The ads on the top of the new queue are taken to have higher weighted ad placement values.

Regarding claim 12, Eldering shuffles the ad queue in real-time in advance of the ad insertion requests and therefore accomplishes these tasks asynchronously.

Regarding claims 17-19, the ads of Eldering may be inserted into predefined commercial breaks as conventional full page ads. However, Eldering also teaches that ads may be presented in association with electronic program guides (EPGs); these ads are taken to represent banner ads in predetermined locations on screen [0027].

Regarding claims 20-22, any of the metadata can be taken to represent the broadly stated placement rule, local parameter value, weight rule and trigger rule.

Regarding claims 23, 72, 74-77, the FORD ad of figure 6 is taken to have an expiration rule of 9pm. Further. however Merriman et al teaches campaign durations that expire and it would have been obvious to one of ordinary skill at the time of the invention to have included expiration metadata with the ads of Eldering so that ads can be stopped from being shown to a viewer after the ad campaign is over. One of

ordinary skill would see the senselessness in continuing to show ads for "new" 2004 model cars in 2007, for example. Providing ad expiration data as part of Eldering's metadata thereby provides an ad placement value rule as part of the control file, the placement value being re-evaluated in a manner as taught by Merriman et al's satisfaction index (si).

Regarding claims 55, 56, 59, 60, any of the 4 values of Merriman et al can be taken to meet the claim scope.

Regarding claim 61, the system of Eldering is taken to include modules programmed to accomplish its function which integrates with the other programmed modules. The modules can be taken to be cooperating applications.

Regarding claim 68, Eldering teaches that a newly detected targeting parameter such as channel='romance channel' causes a plurality of ads to be selected as relevant – Macy's ad, DeBeers ad, Ford Taurus ad, etc. [¶ 0063].

Regarding claim 69, Eldering teaches that targeting (triggering) can be done in accordance with time [¶ 0077].

Regarding claim 70, one of ordinary skill would find it obvious to use any well known and convenient data format in order to provide a schema for representing/structuring the metadata. XML is a well known system for defining data formats and it would have been obvious to one of ordinary skill at the time of the invention to have used XML to represent the metadata of Eldering. Further, applicant indicates that the particular selection of XML as the format is not critical – "The example

is encoded in XML format, although any appropriate format will suffice" [applicant's PGPUB ¶ 0059].

Regarding claim 71, by their nature, Eldering's metadata (control files) encompassing the targeting parameters define a rule set for each associated ad.

Regarding claim 73, Eldering teaches logging the advertising history and reporting such data to a server [¶ 0048].

Regarding claims 80-83, as stated above, any of the 4 specified values (or certain combinations of them) of Merriman et al can be taken to represent the claimed "weight value" and "re-determined placement value". Therefore (end-start) or 1/N can each represent a constant weight value that is used in the multiplication.

7. **Claims 31, 39, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering in view of Merriman et al and Armstrong et al (US7017173)**.

Regarding claims 31, 39, 52, Eldering teaches ad opportunities peculiar to PVRs such as prepended ads, live shows, recorded shows, end of program ads, etc. Eldering does not appear however to teach inserting an ad upon the detection of a pause mode of the PVR. Armstrong et al however teaches that an interactive video on demand system can insert a targeted ad upon detection of paused programming content [abstract]. It would have been obvious to one of ordinary skill at the time of the invention to have inserted an ad when a user of the system of Eldering enters a pause mode so as to enable additional advertising opportunities for advertisers.

Response to Arguments

8. Applicant states that Eldering provides a set top box which determines the next ad to be inserted and that changes in viewing parameters may warrant a change in the ad insertion schedule. Applicant states that Merriman et al compiles statistics on users and networks and that the satisfaction index (SI) algorithm is used. Applicant then argues that modifying Eldering with Merriman et al would change the principle of operation of Eldering. Examiner disagrees, as the combination provides an obvious enhancement to the targeted ads shown to Eldering's users – namely the combination offers an improvement to the ad selection so that not only are user-targeted ads provided, but user targeted ads are inspected to see which ones are "most behind" advertisers expectations. In this manner, the system can more effectively satisfy the advertiser's contracted campaign impressions. Yes, the 'n' of Merriman et al is related to total impressions for a plurality of users, but the PVR client of Eldering already targets to local users' profiles. Merriman et al also targets to local user/client profiles, but also adds the idea of the satisfaction Index which would have been obvious to have added to Eldering's single-user-targeting, so as to more effectively satisfy advertising campaigns.

9. Applicant argues that Eldering and Merriman et al fail to suggest the client multiplying and determining the ad order. However, Eldering's client already determines an ad order for that client. It would have been obvious to one of ordinary skill at the time of the invention to have also taken into account a global impressions history so as to more effectively satisfy advertising campaign impression goals (via Merriman et al's

satisfaction index). Therefore the client of Eldering would perform the ad determination including multiplication for satisfaction index purposes.

10. Regarding claims 80-83, any of the 4 specified values (or certain combinations of them) of Merriman et al can be taken to represent the claimed "weight value" and "re-determined placement value". Therefore (end-start) or 1/N can each represent a constant weight value that is used in the multiplication.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Carlson whose telephone number is 571-272-6716. The examiner can normally be reached on Monday-Fridays; off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571)272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey D. Carlson/
Primary Examiner, Art Unit 3622

Jeffrey D. Carlson
Primary Examiner
Art Unit 3622